under fluorescent light to oxidize grease/soot in urban traffic tunnels. Road surfaces can be covered with catalytic cement which will help air purification for breathing. In addition to pollution abatement, photocatalytic white cement can keep architectural concrete clean and white, maintaining their aesthetic appearance unaltered in time. This technology will give architects and town planners a new weapon to the fight against pollution and to facilitate sustainable economical growth in the country.

One of the most important research areas for future clean energy applications is to look for efficient materials for the production of electricity and/or hydrogen. When sensitized with organic dyes, inorganic narrow band gap semiconductors or noble metals, TiO_2 can absorb light in the visible light region and convert solar energy into electrical energy for solar cell applications. Photocatalytic splitting of water into H_2 and O_2 using TiO_2 nanomaterials continues to be a dream for clean and sustainable energy sources.

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7. "Microwave Synthesis and Characterization of Nanotitania", **T. Suprabha**, Haizel G. Roy, Suresh Mathew, *National Conference on Electron Microscopy (EMSI NC-06)*, Electron Microscopic Society of India, 18-21 April 2006, Thiruvananthapuram.

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